

THE FRONT AND BACK COVERS

The beautiful designs for the front and back covers were drawn by Mr. A. R. Valentine, an artist famous for his work in the Rookwood Potteries and in flower-painting. He is at present engaged on a ten-year commission to paint the wild flowers trees and ferns of California, and there will be in all about 1,300 paintings in the set.

The flowers are keyed as follows: On front cover: No. 1, the soft rose-flushed white,

double tulip, Murillo. No. 3, terra-cotta-colored early tulip, Thomas Moore. On back cover: No. 1, the scarlet tulip, Gesneriana major, which has a deep blue

On back cover: No. 1, the scarlet tulp, Gesneriana major, which has a deep blue center. No. 3, the late tulip, Picotee, white, flushed scarlet. No. 4, another late tulip, Parisian Vellow, one of the best of its color.

BUSINESS TERMS

Cash. Unless otherwise arranged, money must accompany the order.

Remittances under \$1 can be made in stamps; over that amount, Money Orders or Checks are preferred.

Postage, Expressage or Freight will be prepaid by me without cost to customer. Where there are express offices, I generally ship by express.

Safe Carriage Guaranteed. I guarantee that bulbs shall reach my customers in good order, and shall be of good quality. If they are not, the money will be refunded; but claims for damages must be made immediately upon arrival of goods.

Quality of Bulbs. My bulbs are as good as can be bought in America. Many of them are grown at my gardens at "The Terraces." Others are bought in Holland, England and America, and of dealers whose reputations stand highest. I pay the price for quality, and demand it. Ask my customers.

Date of Delivery. While some varieties are ready earlier than October, there is no advantage—but a positive disadvantage—in planting so early in the season. On our coast it is well to wait until slightly cooler weather, and for the first rains if they are not long delayed. This means that October and November are the best planting months. I have better facilities for keeping bulbs in good shape than my customers can have, and the shorter the interval between shipping and planting, the better. Shipments will be made about October 5 to 10, with the exception of some items which are not ripe at that time. I strongly advise against planting later than January 1, except where noted.

Substitutions. I never knowingly send a plant wrongly labeled; but, unless otherwise instructed, when a variety is out of stock I will give better than its value in the nearest thing to it.

Order Early. Orders will be filled in the order of receipt. You may find certain varieties sold out if your order is too long delayed.

Large Quantities can be supplied at reduced rates. Send list of requirements.

My Gardens, "The Terraces," have a favorable climate, an abundance of water, and a wide variety of soil, all combining to make an ideal garden spot. From the scenic standpoint it is probably the most unique garden in the world. By all means come to see it, if you can. Let me know in advance when you will be here.

I ISSUE THE FOLLOWING CATALOGUES:

By book, "HARDY PERENNIALS FOR CALIFORNIA GARDENS," describes the Perennial Plants, California Ferns, and Bulbs for Spring Planting. This catalogue is issued in midwinter.

"BULBS AND WILD-FLOWER SEEDS OF CALIFORNIA" describes our native plants and bulbs, including Lilies. This list is issued every second year, in August.

"BULBS FOR FALL PLANTING" describes the Dutch Bulbs, Narcissi or Daffodils, Iris, Crocus, etc. Issued in September.

Bulbs for Californian Gardens

The Anemones and Ranunculus are among the brightest of the spring bulbous plants and are most excellent as cut-flowers. They are both single and double, and are in almost all colors. During my journeys about San Francisco Bay during their flowering season I have seen them thriving admirably everywhere, and am impelled to offer finer varieties and a larger assortment by that fact.

They thrive best in a loose, light soil, well enriched with finely rotted manure, yet they seem to do well in the prevailing adobes. They should be planted to the depth of 2 inches, from October on, and can be planted even into mid-February. A light mulch of well-rotted manure is an advantage, placed when the bulbs are planted.

Either Anemones or Ranunculus are rather pretty alternated with tulips, and form a very good ground-carpet for the latter. 3 to 4 inches apart is the best planting distance. As a rule, the results are not so good the second year as with new bulbs, and my

advice is to buy these very cheap bulbs every year and insure the best results.

Single Anemones, 20 cts. per doz., \$1.25 per 100.

Double Anemones, 30 cts. per doz., \$1.75 per 100.

There are three classes of the garden Ranunculus having charming variations in form and colorings. All are charming flowers. I offer either French, Persian or Turban Ranunculus at 15 cts. per dozen or \$1 per 100. They are exceedingly varied in color, and a hundred of the general mixture will prove a treat to any flower-lover.

HYACINTHS

No winter-flowering bulbs are more esteemed than these beautiful things, which combine a wax-like texture with clear colors and exquisite fragrance. They can be grown out-of-doors here if the bed is shaded a part of the day, and for this purpose the cheap bulbs, merely to color, are good enough. Plant about 6 inches apart each way,

For flowering in pots the second-size bulbs produce excellent flowers, and are as good as most growers sell, but if very fine flowers are wanted the first-size bulbs are best. All Hyacinth bulbs are grown for forcing. They never do so well the second year, and if grown in pots are useless for another year. New bulbs should be bought every fall.

For indoor blooming the bulbs should be potted in early fall. A compost of two parts loam, one part sand and one part well-rotted manure is the ideal soil. Usually three bulbs are put in 6-inch pots, first putting in some pieces of broken stone to insure drainage. The bulbs should be set so that the tips are just above the soil after potting. Water thoroughly and set in a cool, dark place for six or seven weeks until the bulbs are well rooted. Do not bring into full sunlight at first, but let them come on slowly in a shaded window. By potting bulbs at intervals of two or three weeks, and using care in bringing to the light, you can have a succession of bloom for several weeks.

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For pot culture I offer two grades: My best are the grand exhibition bulbs which often throw several strong stems from one bulb; these are 15 cts, each, \$1.50 per doz.

Lam offering for the first fire a smaller interface of the several strong stems.

I am offering for the first time a smaller size of named bulb which I feel will give excellent satisfaction to the general grower. They are what may be called selected third

Planting of Exhibition Hyacinths

size, and produce a fine, symmetrical stem of excellent quality.
Two or three in a 6-inch pot make a fine effect. I can recommend these either for this purpose or for out-of-door work.

L'Innocence is pure white; Robert Steiger, deep red; Enchantress is a lovely pale porcelain-color; Johann, light blue; Grand Maitre, porcelain-blue; Gertrude, rosy pink; and Gigantea, blush-pink. All 75c. per doz.

Smaller and Cheaper Hyacinths for Bedding

These are really very satisfactory and produce quite nice flowers. They are not named, but colors are separate—White, Rose, Red, Blue, Yellow, and all shades. These are cheap at 50 cts. per doz., \$4 per 100.



Keizerkroon Tulip

TULIPS

All the Tulips are very showy and it is worth much trouble to have them at their best. In pots they can be had by midwinter, while in beds they are at their best from March to May. The methods of culture used in the East and Europe are not adapted to California, and will seldom produce good results; but, by studying the peculiarities of our climate, very fine flowers can be grown with but little trouble.

Culture of Tulips in California

Situation of the Bed. If the bed is exposed to the sun, the bulbs will be forced into a premature bloom with very short stems. To guard against this, choose a situation which is shaded at least one-third of the day,—half the day is better. The northeastern or northwestern corner of a building is best, but trees will give the same shelter. The bed must not be where sharp winds reach it.

Soil. Tulips prefer a light, well-drained soil, but can be grown well in any soil that is not mucky. If the soil is heavy, it should be underdrained with tiles, gravel or any other porous conductor, and the surface should be raised 6 inches.

Manure should be used. Well-rotted cow-manure is best. It may be spread on the surface an inch thick and dug in; or, better yet, applied as in mulching. Where soil is heavy a light coat of air-slaked lime is most excellent. It can be put on a half-inch deep and spaded in, and it will both sweeten and mellow the soil.

Distance Apart and Depth to Plant. Tulips will do well when planted 3 inches apart each way, or sixteen to the square foot. The standard distance is 4 inches apart each way, or nine to the square foot. It is a waste of space to give them more.

Fancy Beds are to be avoided. They are fit only for open spaces, and in California it is foolish to attempt them. A bed 3 to 4 feet wide, in the best situation, is much better. Plant in wide variety so as to prolong the season, and aim to have fine flowers for cutting rather than a mass effect.

Shade. The best shade is one that is continually shifting so that the beds are in the sun awhile and the shade for a time. This is obtained best in the shadows of trees which are not closely planted, or often still better in the outer shade of deciduous trees which are not too dense, and where the light plays and changes.

Mulching. A mulch of rotted manure put on in the spring before the Tulips are through the ground is a most excellent thing. It keeps the ground from being packed and holds moisture to the top. It should be spread neatly over the bed.

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Plant Early. Mid-October is the best time, November about as good; but further delay will be at the expense of the flowers. By no means plant later than January 1, or earlier than October.

Method of Planting. The best method is that used in the great fields in Holland. First, thoroughly spade and pulverize the soil and give drainage if it is needed. Then throw out the soil from a section of the bed to the depth of 7 inches. Put in a layer

TULIPS, continued

of manure an inch deep and cover with an inch and a half of soil. Set your bulbs 3 or 4 inches apart each way, and then cover them gently with top-soil. Proceed in this way until the bed is planted, and then level with the remaining soil. As the bulbs are about 2 inches high, this will give them a cover of about 3 inches of soil. Do not use any manure that has not gone through the first heating. In cold soils, plant an inch shallower. If the soil is heavy, put some sharp sand around the bulbs.

Watering. During the winter and early spring, give only enough water to keep the bed moist; usually the rain is ample. As soon as flower-buds appear, water liberally

until a few weeks after the flowering is over and then dry them off.

Digging the Bulbs when Ripe. A Tulip bulb is ripe when the leaves turn yellow. There is no need to wait until they are entirely dry. Late Tulips can be left in the ground from year to year, yet this is not the best practice, as they form many off-sets and soon become crowded. Then the roots of trees and shrubs are apt to encroach on the bed, and annual planting allows one to cut them out. Still again the soil must be annually enriched if the best results are to be had, and cultivation to a good depth is a distinct advantage.

Method of Storing. All that is needed is to put the bulbs in bags or boxes in a dry place, and leave them there until proper planting time.

Gophers. Like the poor, they are always with us, and they like Tulips. In my gardens, with a frontage of a mile, we control them by trapping. It is hard to poison them in a garden because there is so much good food, and they store away the greater part of what they take. Some soft food, like carrots, parsnips, green corn or raisins, with strychnine, is the best method of poisoning.

Gopher Fences. Here is a cheap way of fencing them out. Use wire mesh described in catalogues as 1/2-inch-mesh poultry fence, 30 inches high. A ditch 30 inches deep is dug, the netting stood upright in it, and the soil then worked down on both sides and packed. A gopher very seldom goes below this depth, or runs along the top of the ground. For most purposes the gopher fence answers well.

Tulips in Boxes. If gophers are numerous, the bulbs can be planted in boxes 8 inches deep, with soil as indicated. The boxes should be watered liberally, even in winter.



Golden Crown Tulips (see page 8)

Tulips in Pots for Winter The best time to pot is in early fall. The best soil for potting is a compost of two parts of garden loam to one part of wellrotted cow manure, and one part of sharp sand. Use 5- or 6-inch pots, and first put in some broken pieces of crock with a little loose material to insure good drainage. For a 5-inch pot, use three to five bulbs, and for a 6-inch pot, four to seven. Plant so that the tip of the bulb projects, and water moderately. Put in a cool, dark place for five or six weeks until they are well rooted. This can be told by gently striking the side of the pot until the soil will slip out. If the pot is filled with a mass of roots, the bulbs are ready to bring to the light. Water moderately, and do not give full sunlight, but let them come on slowly in a window or cool greenhouse. If brought into a warm room, the stems will be quite short, and blooms will not open well.

The Best Varieties to Pot. Any Early Single Tulip will do. Chrysolora, Cottage Maid and Keizerkroon are especially fine. Late Tulips seldom do well in pots.

EARLY SINGLE TULIPS

With proper regard for shade and position, I certainly recommend planting Early Tulips out-of-doors. I usually alternate groups of these with Late Tulips and Darwin Tulips, and thus have a pretty show for a much longer time.

In the East they grow these by the millions in open ground and make a wonderful show with them. In California we can grow them quite as well in pots, but they will be failures in the open ground, and to succeed must be shaded as indicated on page 4.

The groups may be of from twelve to as high as 150 of a sort, and can be planted close together, as they do not flower at the same time. The foliage of one sets off the others. Well planned, such a bed is very satisfactory.

Any of the following varieties will do for this, and in the Bay cities either the east or west side of a house or the same situation as regards trees will answer.

The varieties that I offer are among the tallest of this class, and are all well adapted to pot culture (see bottom of preceding page).

For forcing and pot culture these are the only Tulips to use.

YELLOWS: Chrysolora is a large flower, not very long-stemmed, and one of the favorites for potting. The price is 3 cts. each, 30 cts. per doz., \$2 per 100.

WHITES: White Swan is so tall as almost to suggest a late Tulip, and lasts a long time. Prices same as above.

REDS AND SCARLETS: Sparkler, or Cramoisi Brillant, fairly dazzles the eye with its orange-scarlet flowers poised on long stems; Crimson King

is scarlet, but tending more to glowing red, and wonderful in its intense colors. The price is 4 cts. each, 40 cts. per doz., \$3 per 100.

YELLOWS AND REDS: A favorite in these colors is Keizerkroon, whose picture on page 4 makes it outsell any other early Tulip that I offer. Look at the picture, and fancy the glowing crimson-scarlet center in striking contrast to the bright yellow rim. It is large, also, and one of the best potting Tulips. Keizerkroon is 4 cts. each, 35 cts. per doz., \$2.50 per 100. Cottage Maid is a lovely rose-flushed white, and one of the favorites for potting; the price is 3 cts. each, 25 cts. per doz., \$2 per 100. Prince of Austria is a superb orange-red, and very showy. 3 cts. each, 30 cts. per doz.

TERRA-COTTA: Thomas Moore is a handsome flower. The color is fine terra-cotta, flushed with gold; it pleases everyone. Price 3 cts. each, 30 cts. per doz., \$2 per 100, See No. 3, front cover.

A Fine Collection of Early Single Tulips

For \$2 I will send a collection of 100 Tulips, selected by me from above sets, giving ten or more of each labeled. This will give a fine variety of color and form.



Late Tulips of the Rembrandt Class

DOUBLE EARLY TULIPS

There are many Double Early Tulips, and while I have little use for most of them, Murillo is too good to pass by. It is a double Cottage Maid in soft rose-flushed white. The flowers suggest pondlilies. Either in pots or in the garden it is charming, and it is very decorative when picked. 3c. each, 3o cts. per doz., \$2 per 100. See No. 1, front cover.

PARROT TULIPS

This is a race of gorgeously colored Tulips, with very large flowers fancifully cut and slashed in the oddest way. They have short stems, and must be grown here like early single Tulips—with considerable light shade. Can be forced late without heat, and are specially valuable as potted plants. Mixed bulbs, all colors, 3 cts. each, 25 cts. per doz., \$1.50 per 100.

MAY-FLOWERING, or COTTAGE TULIPS

These splendid, long-stemmed Tulips and the equally tall Darwins and their cousins, the Rem-



Parrot Tulips

brandts, are late-flowering classes well adapted to California conditions. When a few points are carefully observed, they can be grown in wonderful perfection. In exceptional springs they do well in the open sun,—such a spring as that of 1911; but more often hot days come early, and a light shade is essential to get all of the beauty they are capable of producing.

If you are growing the Cottage Tulips for cut-flowers rather than for a mass of color, and the bed is large, the best possible shade is a frame-work with moveable laths. Mext to that is the shade of deciduous trees which are in leaf at Tulip-time. Apples or other fruit trees are particularly good. Or a bed can be so planted that it gets intervals of sunshine at different times during the day, and the shadows of any sort of trees or of buildings at intervals. The shade of a house well answers, and the bed may be either on the east or west side, but not north or south of a building; a situation where the shade of a building covers the bed at some time of the day, but leaves sun earlier or later, is an excellent arrangement.

Again, if we would have the best, we must water liberally when the buds first show until the flowers fade. I do not mean simply holding the hose on them a few minutes each evening, wetting the surface and leaving the under soil half dry; but, at intervals of a few days, giving good soakings. I have found a mulch of half-rotted manure put on before the Tulips come through the ground, a most excellent thing. When I want the finest flowers, I dissolve nitrate of soda to make a saturated solution and dilute it to one-quarter strength. This I sprinkle on the soil every few days as the buds swell, and wash in with pure water. Not all of this trouble is necessary to have good flowers, but the observance of each point improves them.

All late Tulips can be planted in the borders with perennials or low shrubs, if their situation is carefully marked so that they will not be dug into. But the best arrangement is to plant in beds 3 to 4 feet wide, and to lift, when ripe, each season. This method clears the bed for the summer-flowering annuals that must be planted early in the season if the gardener is to achieve the greatest success.

COLLECTION OF LATE TULIPS

The ten sorts in this collection are excellent varieties, the value given is most satisfactory, and I am happy to say that my customers have realized this and bought this collection most liberally. One hundred bulbs, my selection, \$2.25; fifty bulbs, \$1.25.

In REDS and SCARLETS I offer Gesneriana major, which is really the very best of all red Tulips. The color is a glowing scarlet, with blueblack eye, and the stems are often 22 inches high (see No. 1 on back cover); the price is 3 cts. each, 30 cts. per doz., \$2 per 100, \$14 per 1,000. Inglescombe Scarlet is one of the best late Tulips; the color is a bright flame and very brilliant; the flowers are borne on reasonably long stems; this variety sells for 6 cts. each, 60 cts. per doz., \$4.50 per 100. Fulgens is clear deep red, with pointed petals, and it will be just as much of a favorite when it is better known; the price is 3 cts. each, 30 cts. per doz., \$2 per 100. Gorgeous is the only word for La Merveille (The Marvel); at first the color is orange-red then turns to a rare shade of red.

Similar in color, but more like the Major in habit is Gesneriana aurantiaca, the orange Gesneriana, a grand flower; and Macrospeila, another form of Gesneriana, is

deep blood-red, with showy black eye; in the sun no Tulip outshines it. The price of these three varieties is 3 cts. each, 30 cts. per doz., \$2 per 100.

YELLOWS: In yellows I offer three fine varieties. Parisian Yellow (see No. 4, back cover) is perhaps the best yellow; the price is 4 cts. each, 35 cts. per doz., \$2.50 per 100, \$20 per 1,000. Bouton d'Or, golden, tall, stiff-stemmed and makes a fine color mass when cut, although smaller flowers than the others. This variety sells for 3 cts. each, 30 cts. per doz., \$1.75 per 100. **Retroflexa** is a light canary-yellow, long-stemmed, large-flowered and with reflexed petals. This handsome variety sells for 3 cts. each, 30 cts. per doz., \$2 per 100.

SCARLET and GOLD. The preceding Tulips are all in solid colors. Golden Crown, with the



body of rich yellow, penciled with scarlet, finally becomes a sort of old-gold throughout. It is a dwarf grower, and the bulbs sell for 3 cts. each, 30 cts. per doz., \$2 per 100.

WHITE and PINK: A pretty variety is Picotee, which opens light cream, slightly penciled with pink, and becomes a pure white suffused throughout with pink. 3 cts. each, 30 cts. per doz., \$2 per 100. (See No. 3, back cover.) Inglescombe Pink is a charming variety; the color is a delicate rose-pink, tinted salmon. 4 cts, each, 40 cts. per doz., \$2.50 per 100.

GIANT DARWINS

The Darwin Tulips are May-flowering Tulips, but in a class by themselves. They used to be called Breeders, and were badly neglected; but the wonderfully fine varieties brought out during the last fifteen years have pushed them to a front place. With broad cups of large size, on stout and very tall stems (some are 30 inches high), they have great lasting qualities, and whether in beds or vases they always attract attention. At first the cup is incurved, but day by day it becomes broader until the petals spread out flat and are as much as 10 inches across. The colors are simply wonderful in variety, from the most delicate pink imaginable to a deep crimson.

Special Culture. The directions given for May-flowering Tulips must be followed carefully if it is desired to have such grand flowers as Darwins are capable of giving. The shade, the abundant watering when flowering, and the added fertilizers are necessary. I supply exceptionally fine bulbs, but my customers must cooperate by giving

the care.

NAMED DARWIN TULIPS

Such has been the demand for Darwin Tulips throughout the world for the last few years that all Dutch dealers have increased their prices for the bulbs, necessitating a corresponding increase by retailers. In the set of Darwin Tulips that I offer, every one is tall, with large flowers of fine shape and superb coloring. The most expensive varieties to be found in other catalogues are no finer. I have a very large collection of other varieties; but the ordinary planter would not care for a larger number than begin offered.

varieties; but the ordinary planter would not care for a larger number than herein offered. In soft pink I offer Clara Butt, which is greatly admired and made a sensation in the beds at the Exposition. It has been high-priced, but I can now give fine bulbs at 45 cts. per doz. and \$3 per 100. Calliope is taller and a fine shade of rose-pink, at 50 cts. per doz., \$4 per 100. Baronne de la Tonnaye is similar but a much later bloomer and prolongs the season, same price as the last. Gretchen is a low-growing Darwin, with exquisite, soft pink flowers, 35 cts. per doz., \$2.50 per 100. Gustave Dofé is a splendid, large-flowered variety, with rose-colored flowers. 50 cts. per doz., \$4 per 100. Mrs. Krelage is a soft rose with pale edge, and a Tulip of large size. 6 cts. each, 60 cts. per doz.

In brilliant scarlet I have Glory, a very large flower, at 7 cts. each or 75 cts. per doz Pride of Haarlem is a glowing rosy carmine, very large, and a notable Tulip. 5 cts.

each, 50 cts. per doz., \$3.50 per 100.

One of the most admired Tulips in the Netherlands Gardens at the Exposition is the great-flowered Tulip, Nauticas, a cerise of great beauty. 4 cts. each, 40 cts. per doz., \$3 per 100. In deep glowing red Harry Veitch, which has a black center, is always conspicuous. 5 cts. each, 50 cts. per doz., \$3.50 per 100.

Still darker is Allard Pierson, so dark a red as to be nearly black, at the same price; and King Harold, which is a little brighter, is a great flower, at 6 cts. each, 60 cts. per doz.

Professor Francis Darwin is a vivid orange-scarlet with a

blue base. 4 cts. each, 40 cts. per doz.

The best of the heliotrope-blue Darwins is Rev. H. Ewbank, most exquisite, and this I sell at 7 cts. each, 75 cts. per doz.

Bronze Queen (also known as Clio) attracted much attention in the Exposition gardens. It is yellow-tinged apricot and brown. 7 cts. each, 75 cts. per doz.

Superb Collection of Fine Named Darwin Tulips

From the above named and other fine Darwin Tulips I put up a splendid named collection of ten sorts in a wide range of color, and as good bulbs as I can buy. Better value cannot be given for the money. Bought separately they would cost far more, and the person who is not acquainted with the varieties had better invest his money in these.

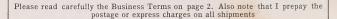
I give 100 bulbs in ten very fine sorts, 10 of each, all in separate parcels and named, for \$3. For \$1.75 the same set, 5 of each, 50 in all.

Valuable Mixture Collections That Are Full of Surprises

In my garden, with its wonderful collection covering all sorts of Tulips and fully three hundred varieties, some get into mixtures every year. Among these are many of the very finest, some sorts that are worth ten cents each and more. I will give a general mixture at \$1.50 per 100. This will be full of surprises.

DARWIN MIXTURES. Even greater value, for in a hundred bulbs there may be twenty sorts. They are surely fine, and at \$2.25

Darwin Tulips



DAFFODILS

You couldn't possibly plant too many of these splendid spring-flowering bulbs. They are perfectly hardy, are as easily grown as onions or turnips, need hardly any watering, no care after they have flowered, and are not troubled by rats or gophers. They give a liberal bloom when flowers are most prized, in early spring, and for cut-flowers are unexcelled. Plant a few



Glory of Levden Daffodil

dozen, if you can do no more; hundreds if you can, and, if your purse will allow you, plant beds of thousands. Rest assured that you can buy no spring-blooming bulbs which will give greater satisfaction. I grow many Daffodils, and my customers say that they cannot get better ones elsewhere. My entire assortment was selected with the aid of the first Daffodil-growers of the world, and even then I have dropped many varieties that I have tested.

Culture of Daffodils

In California, Daffodils will grow in any soil. The soil which best suits them is a rich loam with abundant moisture during the winter and which gets dry in the summer. Dig the ground up deeply and thoroughly, and then let it settle a few weeks before planting. Do not use fresh stable

manure. The best fertilizer available here in California is crushed bone (commonly called "bone meal"), at the rate of one and one-half ounces to the square yard. With this sulphate of potash can be used at the rate of three-fourths ounce per square yard. Daffodils are especially fond of lime, and a sprinkling of quicklime on the soil before

it is dug is of advantage.

Planting and Lifting. The best time to plant is with the first rains, although little difference will be noticed in planting up to November 1. After that date the bulbs lose by being kept out of the ground. The bulbs may be left undisturbed for years, but it is better to lift them and reset every second year, and, with the exception of the various forms of Poeticus, there is some gain in lifting every year and replanting at once. The bulbs produce offsets, and become too crowded in three years to do well. Plant the Poeticus varieties with liberal space, and do not move until crowding makes it necessary.

Depth to Plant. The averge depth to plant is from 2 to 3 inches. Better less than more. A safe rule is to cover one and a half times their height.

Shade. All Daffodils prefer light shade. In California we should select a cool situation if the soil is light, and much finer and longer stems will be had when they are shaded from one-fourth to one-half the day. This does not mean that the bulbs will not thrive quite as well in sun as in shade. Excellent results can be had by planting Daffodils in groups among shrubs or hardy perennials.

Watering. Daffodils like much water when growing. If the ground is kept almost

wet until after blooming time, they will be all the better.

When to Dig. If the leaves are cut from Daffodils while they are still green, it injures the bulbs. After they have flowered they should be left alone for from six to eight weeks, when the leaves will turn yellow. They are then ripe enough to dig, if it is desired to plant other bulbs in the same space. When dug they should first be well dried in a cool, airy place, and then stored in a dry place until time to replant comes.

I consider the long lines of Daffodils that we so often find along paths in gardens a bad garden mistake. It necessitates having a ragged border for too long a period after flowering. It is much better to plant the bulbs in bold groups at least 4 feet from the edge, as that would allow room for plants which will make the garden interesting before Daffodil-time, and which can easily be so arranged as to grow up and conceal the dying foliage as it ripens and the bare ground later. A good arrangement is a bright border of aubrietias which flower all winter, with such plants as arabis and pansies back of them, and good groups of strong perennials still farther back and interspersed among the masses of Daffodils.

NARCISSI, DAFFODILS, JONQUILS

The difference between Narcissi, Daffodils and Jonquils is this: Narcissus is the botanical name of all of the plants of this group, whether they have large flowers with trumpets like Emperor and Golden Spur, small flowers like the Poeticus, or two or more flowers on a stem as in the Jonquils, the Chinese Lilies and their European sisters. All are Narcissi, alike. A Daffodil is a Narcissus with a single flower on a stem, whether with large or small trumpet; Jonquils are Narcissi with two or three shallow, cupped flowers of a pleasing yellow, and quite fragrant. The Jonquil comes from juncus, or rushes, because the leaves resemble that plant. Polyanthus Narcissi are all of the sorts which, like the Chinese Sacred Lily, have the flowers in bunches. The Polyanthus class is the most common of the family, and probably the most variable; they are not so hardy as the others, and need a little more attention—but they are worth it.

DAFFODILS WITH LONG TRUMPETS

These are the great favorites among Daffodils, and are grown in immense numbers, both in the garden and pots. All are fine as cut-flowers, and the first to come into flower is Golden Spur, the yellow Daffodil, a rich, solid yellow. Later comes Emperor, with a much larger flower, in a lighter but very pleasing yellow, while Empress (see picture below) is in two colors, the trumpet being yellow, perianth white. Victoria resembles Empress, but is made pleasingly distinct by a broader trumpet. All are among the flowers best worth growing, and at the same price for good bulbs—5 cts. each, 50 cts. per doz., \$3 per 100.

Of Emperor and Empress I have fine, solid bulbs, sure to give fine flowers, at \$2 per 100. At that price you can afford a good bed. These are the two sorts of which

you want plenty.

Like a giant Golden Spur is Glory of Leyden, one of the largest of all Daffodils, and makes a glorious show. It is worth 15 cts. each, or \$1.50 per doz.

DAFFODILS WITH CUP-SHAPED TRUMPETS

I am rather partial to these. With the exception of Sir Watkin, they lack the size of the previous section, but the stems are long, the flowers gracefully poised, and, to

my liking, they make much better cut-flowers. There is no sameness in their forms. Each has some little individuality that endears it to you and as you come to know them intimately you particularly note these peculiarities.

Barrii conspicuus, for instance, has a canary-yellow flower illuminated by a scarlet cup, and is very long-stemmed. It lasts long and becomes almost white, and its great merit is its adaptability to naturalizing. Fine flowering bulbs at 3 cts. each, 25 cts, per doz., \$1.50 per 100.

Cynosure, too, is a good thing, and the flowers are light yellow, the cup just edged scarlet, making a brilliant combination. Its price is the same as the preceding variety. Both are so cheap that they should be found in every California garden.

Sir Watkin is in a class by itself. It is about as large as the giant long trumpets, and is a great, light yellow wheel. Some of the flowers are 5 inches across. It is also known as the "Welsh Giant", and can be had for 4 cts. each, 40 cts. per doz., 83 per 100; with fine, solid bulbs, sure to flower, at \$2 per 100.



Narcissi, Empress

DAFFODILS WITH CUP-SHAPED TRUMPETS, continued

When I want to send a friend Daffodils that I know will please, I send a good bunch of Mrs. Langtry. Somehow our Californians do not seem to have discovered this fine flower, which has every Daffodil virtue. The flowers are of fair size, and at first a rich creamy white, just tinted with gold. Later they become pure white. They are most beautifully formed and very lasting. They are very cheap at 3 cts. each, 25 cts. per doz., and \$2 per 100; if you wish a few thousands I will make them much less.

Katherine Spurrell can only be described as exquisite. The rounded flower is pure white and of a delightful satiny texture. I know of no more lovely sort. 6 cts. each,

60 cts. per doz.

It has been the ambition of every Daffodil producer to breed an all-red flower, and C. J. Backhouse is as near as they have arrived. A little under size, the flower is deep yellow, suffused throughout with scarlet. The price is 4 cts. each, 40 cts. per doz.

POET'S NARCISSUS AND JONQUILS

Jonquils have three great merits: First, they are among the very earliest flowers to bloom, and whether potted or in the garden, they are easily grown; next, they have a rich, yellow color, and last, but not least, they have a delicious fragrance. They are flowers which should be planted liberally and when planted in the garden will flower for years with little attention.

Jonquil Campernelle is small-flowered and very sweet-scented, and this I sell at

15 cts. per doz., or \$1 per 100.

Jonquil Rugulosus is much larger-flowered and larger-bulbed, and this I sell at

30 cts. per doz., and \$1.75 per 100.

Poeticus ornatus is my choice among the Poet's Narcissi. It is most charming with its pure white flower with scarlet cup. It is fragrant and early flowering, and, still better, it is among the surest of all bloomers. Few bulbs fail to give a flower, while many give two, or even three. My price for very fine bulbs is 2 cts. each, 20 cts. per doz., and 8.1.25 per 100. I can supply smaller but excellent bulbs at \$1 per 100, and bulbs for naturalizing still cheaper.

The old Poet's Narcissus, known better now as Poeticus of the Gardens, is a very fine flower. The stems are stout and tall, the flowers large and very fragrant, and it is



Poet's Narcissi

a late bloomer, coming after the main crop of Daffoldils is gone. If it would only flower more reliably, it would be ideal; and, as it is, there is no Daffoldil grown that is more esteemed and possibly none is better for either cutting or naturalizing. It needs a heavy soil and abundant moisture, and, if well grown, about 75 per cent of old bulbs flower. Large bulbs of the very best quality at 2 cts. each, 20 cts. per doz., \$1.25 per 100.

HYBRIDS AND IMPROVED SORTS of Poet's Narcissi are now offered and highly praised. I have grown some of the best, but fail to see the value.

Poet's Narcissi are not at their best the first year. They get better with age. They are perfectly hardy, are among the very best for naturalizing, and need not be disturbed until they begin to crowd.

MIXED DAFFODILS

In a large garden bulbs will get mixed, and often the finest sorts are among the accidental mixtures. My Mixed Daffodils are a most unusual bargain at 30 cts. per doz., \$1.50 per 100, \$12.50 per 1,000.

THE IRISES

JAPANESE IRIS

Gloriously beautiful plants are Japanese Irises. At their best, stems 4 feet tall rise from a mass of grassy leaves, and bear at their tops flowers as much as a foot across. The colors are delicate, and the texture of the flowers is like silk.

These are my varieties: **Apollo**, pure white with pink center; **Blue Danube**, double, deep indigo-blue, center violet shading to yellow; **Frate**, double, silvery white, veined and shaded with lilac, center deep lilac; **Helen von Siebold**, reddish purple with white

veins and a yellow center; Oriole, double, rich plum-color shading deeper toward the center, and brightly marked with yellow; Pyramid, also double, lilac-blue, center of each petal shaded white; Robert Craig, a delicate French gray with violet veins, most charming; Topaz, single, reddish amaranth throughout; T. S. Ware, reddish violet, veined white and white center with some lemon markings; Victor, white, veined violet-purple, pure violet-purple center.

Strong plants of named varieties at 25 cts. each, or \$2 a dozen.

Plants can be set out from August to March. Where plenty of water is available, September planting is the best. They do well on the edge of ponds, running streams or ditches, and will grow under several inches of water. Heavy feeding and plenty of water are necessary.

On dry hills plant in rows 3½ feet across and a foot apart in the row; the plants about 3 inches above the trough between the rows. Give a dressing of nitrate of soda and bone meal when planting, Mulch with manure in spring. The ground should be kept well cultivated, and do not allow it to become hard or baked. The plants will grow in almost any soil, if it is made fairly rich, and the roots supplied with moisture during the summer. A garden cannot have too many of these splendid flowers, each year the clumps increase in size and become more valuable.



Spanish Iris (see page 14)

GERMAN IRIS

The German Iris is one of the very best flowers that the garden can hold. Every-body knows the older sorts under the name of Flag Lilies, or Fleur-de-Lis, but few know the lovely new sorts, either in dwarf or tall. In structure of flower and in the delicate colorings the Irises are rivals of the aristocratic orchids, but they can be grown successfully in the most humble garden. This Iris will grow in either dry or wet soils, sun or shade; yet, in rather good soils, with moderate moisture, it does its best. The bulbs should be reset about every third year, in August. Plant new bulbs before Christmas, at the latest.

I have unnamed bulbs in white, blue or purple at 10 cts. each, \$1 per dozen and \$5 roo. Or I will put up sets of twenty of the finest sorts, one each, unnamed, for \$2.50 (with names, \$4 for the 20).

Purdy's Blue is a light blue, very sweet-scented sort and a fine thing. Price 20 cts. Irises of the Pallida class are very tall plants, with stems often 4 feet high, and among the best of these is Odoratissima, almost the same as Princess Beatrice, at 25 cts. each. I have quite a number of this class in quantities too small to offer, and can make sets at 30 cts. each variety.

MOURNING IRIS

The Mourning Iris, as Iris Susiana is called, is a bulbous Iris with large, bluish flowers veined with brown, and so odd as to attract attention wherever it is grown. The bulbs are handled dry, and must be planted before Christmas, if possible. I sell them at 20 cts. each, or \$2 per dozen.

SPANISH IRIS

The large flowers have very clear coloring, and are borne at the top of long, stiff but slender stems. Few flowers combine more good points, either for cut-flowers or garden decoration, and luckily they are very cheap. The colors range from the darkest blue to pure white, clear yellow, and have many marvelous combinations of stripes and splashes of color. These Irises have been known in America for only about ten years.

Culture. They do best in a thoroughly worked light or fairly heavy loam, and indeed do better in adobe than in lighter soils. Plant about 3 inches deep and water freely until after flowering. Light shade helps, but dense shade is a detriment. They do not need to be lifted for several years, and they flower more freely each season.

I offer two mixtures: Trade Mixture—this is put up in Holland and is good. The blands are fair, and the varieties of an average; most of them are from the best named sorts, but the bulbs are not large size. Price, 15 cts. per doz., 75 cts. per 100, \$6 per 1,000.

Purdy's Superb Mixture. I make this up myself by using equal quantities of the

Purdy's Superb Mixture. I make this up myself by using equal quantities of the finest named sorts. It saves me the trouble of labeling and wrapping a lot of parcels, and it gives you the finest quality at a lower rate. 20 cts. per doz., \$1 per 100, \$0 per 1,000,



English Iris

NAMED SPANISH IRIS

In these I buy bulbs of unusually high quality and of the best standard varieties. No better can be bought.

In yellow, Chrysolora, early and large; Cajanus, late and tall; Sophie Jaffe. In blues, Alex. von Humboldt, and the dark blue Darling. In white, Belle Chinoise, British Queen and Blanche Superbe; also Louise, in white and dark blue; La Tendresse is white, tinged yellow; Snowball is white, tinged blue. All at 20 cts. per doz., \$1.25 per 100, \$100 per 1,000 rate. Then there is Bronze King, a good bronze, at 30 cts. per doz.

ENGLISH IRIS

The English Irises are too little known. Like their cousins, the Spanish Irises, the bulbs can be handled dry, and also like them, they prefer an open situation and rather heavy and moist soil, though they will grow anywhere. The beautiful drawing by Mr. Valentine on this page well shows their beauty. The glorious flowers, much larger than the Spanish Irises, come in all shades, from blue to white, with many exquisite lavenders. The plants bloom freely under ordinary conditions and are very effective in masses. Mixed bulbs, all 50 cts. per doz., \$1.75, per 100.

DUTCH IRIS

A new hybrid race of bulbous Irises, with the habit of the Spanish Iris but much larger flowers. The range of colors is as wide as with Spanish Irises, and they flower at least two weeks earlier. They are very fine cut-flowers. I offer fine mixed bulbs at 60 cts. per doz.

Various Bulbs for Fall Planting

CROCUS are among the very earliest of spring flowers, and most pleasing either in pots or in the open ground. I have not seen them successfully naturalized in grass, but they do well mixed with tulips, Spanish irises or anything but narcissi. They make a pleasing ground-cover. I have extra-fine bulbs in white, striped, blue, purple and yellow at 30 cts. per doz., \$1.50 per 100.

IXIAS. These are small plants with very pretty flowers, borne freely on long, studied stems. They come in shades of white, red, scarlet and yellow, and are excellent cut-flowers. They like a warm situation, good drainage, and prefer a light, warm soil. I make a mixture of ten fine varieties for 25 cts. per doz., \$1.25 per 100.

MUSCARI, or GRAPE HYACINTHS. Heavenly Blue is the best of the Grape Hyacinths, the bluest of blues, and is a delightful little flower. I have a thousand of these dotting a slope with light green carpeting, and the result is exquisite. In smaller numbers, or in pots, they are just as fine. 25 cts. per doz.

Plumosus is the Plume Hyacinth and very different, with its odd purple flower more like a feather than a flower. 3 cts. each, 30 cts. per doz.

SPARAXIS are cousins of the gladioli and ixias, with very bright flowers, and need the same culture as ixias. The common sorts are 8 inches to a foot high, and well worth growing. Of them 1 offer a very fine mixture at 20 cts. per dox, \$1.50 per 100.

EREMURUS Himalaicus is a striking plant, with large leaves something like an agapanthus, and a very stout stalk, growing 6 to 8 feet high, with many pure white flowers. The bulbs are large and cost \$1.25 each.

GLADIOLI FOR FALL PLANTING

SMALL-FLOWERED EARLY SORTS

All of this class are most satisfactory for beds or for cutting. They should be planted by the hundreds. Words fail to tell how handsome they are, with their long spikes and richly colored flowers of white, red and pink. As I watch them unfold their beauties day after day, I naturally feel that I would like to have all my friends know and grow them.

Culture. They like light and loose soil, and demand plenty of water before and during blooming period, and to be dried off about a month after flowering. They can remain in the ground if reset every second or third year. The bulbs of the Bride, Nanus and Ramosus should be planted before Christmas.

The pure white Bride is the florist's standby and a splendid flower. Blushing Bride is pinkish and as good, while the exquisite little Nanus in its various shades of white and pink is simply delightful. Do not fail to buy some. Quite different is Ramosus, a muchbranched species with richly marked flowers in shades of red, the spikes often 2 to 3 feet high, and splendid for large bouquets.

Bride and Blushing Bride, at the same price, 25 cts. per doz., \$1.25 per 100; Nanus and Peach Blossom are 40 cts. per doz., \$2.50 per 100; Ramosus is 50 cts. per doz., \$3 per 100.

The Gladiolus is one of the finest flowers for cutting that I know of, and it is growing very popular for that purpose. If the spikes are cut when the first flowers open, they will keep for a week or more in water, and day by day the buds will open until the long stem is aglow.

SUMMER-FLOWERING GLADIOLI

For these I refer you to my Hardy Plant Catalogue. I deliver in either spring or fall, but recommend spring planting.

CARL PURDY

The Terraces

UKIAH, CALIFORNIA

